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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,318	06/22/2005	Tomohiro Chino	019519-442	9209
21839 DIJCHANAN	7590 06/08/2007 INCERSOLL & ROOM	EXAMINER		
BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404			SHAH, MANISH S	
ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER
•			2853	
			MAIL DATE	DELIVERY MODE
			06/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/511,318	CHINO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Manish S. Shah	2853				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) <u>1-16</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-16</u> is/are rejected. 7)□ Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.	•				
Application Papers						
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
•						
Attachment(s)						
1) Notice of References Cited (PTO-892)		mary (PTO-413)				
<ul> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date 10/15/2004.</li> </ul>		ail Date mal Patent Application				

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehmann et al. (# US 6500247).

Lehmann discloses an ink jet recording recoding method ejecting ink composition on the recording medium, wherein recording medium is paper, coated paper, or textile (column: 33, line: 10-30). The ink composition comprises a dis-azo compound (see Abstract), which has a general formula as shown below (see Abstract):

$$(O_{j_0,2})_{j_0,2} = (O_{j_0,2})_{j_0,2} = (O_{j_0,2})_{j_0,2}$$

Lehmann et al. differs from the claim of the present invention is that the two or more substituents having a pKa value in water of –10 to 5 and which has an oxidation potential more positive than 0.8 V (vs SCE).

However, Lehmann teaches the same coloring compound as applicant's claimed invention, therefore it obvious that it has same property as applicant claimed. Therefore Lehmann et al. obviously discloses the pKa value in water of –10 to 5 and has an oxidation potential more positive than 0.8 V.

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2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millard et al. (# US 2004/0089198).

Millard et al. discloses an ink jet recording recoding method ejecting ink composition on the recording medium, wherein recording medium is paper, coated paper, or textile ([0055]-[0056]; see Abstract). The ink composition comprises a dis-azo compound (see Abstract), which has a general formula as shown below (see Abstract):

$$A-N=N-B-N=N$$

$$R^{2}$$

wherein:

A is optionally substituted aryl;

B is optionally substituted arylene; and

R<sup>1</sup> and R<sup>2</sup> are each independently NR<sup>3</sup>R<sup>4</sup>, hydroxy, alkoxy or hydrocarbyl;

R<sup>3</sup> and R<sup>4</sup> are each independently H, alkoxy or C<sub>1-30</sub> hydrocarbyl or R<sup>3</sup> and R<sup>4</sup> together with the nitrogen atom to which they are attached represent an aliphatic or aromatic ring system.

Millard et al. differs from the claim of the present invention is that the two or more substituents having a pKa value in water of –10 to 5 and which has an oxidation potential more positive than 0.8 V (vs SCE).

However, Millard et al. teaches the same coloring compound as applicant's claimed invention, therefore it is obvious that it has same property as applicant claimed. Therefore Millard et al. obviously discloses the pKa value in water of –10 to 5 and has an oxidation potential more positive than 0.8 V.

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## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Manish S. Shah Primary Examiner Art Unit 2853

MSS 6/4/07

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